

REMARKS

By the foregoing Amendment, Claims 1, 13, 14 and 15 are amended. Entry of the Amendment, and favorable consideration thereof is earnestly requested.

The Examiner has rejected all pending claims either under 35 U.S.C. §102(b) as being anticipated by, or under 35 U.S.C. §103(a) as being unpatentable over, Smith et al. (U.S. Patent No. 4,635,761). Applicant respectfully asks the examiner to reconsider these rejections in view of the above Amendments and the below Remarks.

The present invention is directed to a modular disc brake, preferably for a heavy road vehicle. The modular disc brake includes a frame, a house and a cover. A brake mechanism forming a single pre-mounted unit is received in the house. The modules are held together by means of pull rods and nuts. The house is received in a recess of the frame. The cover covers the end of the house. As disclosed, the modular elements of the caliper (i.e., the frame, house and cover) are preferably designed so as to allow for ready access to the brake mechanism and such that machining of the caliper is less cumbersome than in known designs in that no deep recesses need to be machined. All claims have been amended to require a very specific configuration which allows these objectives to be achieved.

More specifically, all claims have been amended to require, among other elements, (i) that the frame include a recess defined by an outer peripheral wall and a floor, the floor having at least one hole therein, (ii) that the house comprises an outer peripheral wall and a floor, the floor having at least one hole therein, and (iii) that the outer peripheral wall of the house corresponds in size and shape to the outer peripheral wall of the recess, and that the house is disposed within the recess in the frame such that the floor of the house abuts the floor of the recess and such that the hole in the floor of the house is aligned with the hole in the floor of the recess such that the at least one thrust unit may be passed through the floor

of the house and the floor of the recess. Applicant respectfully submits that Smith et al. does not disclose, teach or suggest these limitations.

The very specific configuration of the modular disc brake required by all claims, as amended, provides a brake which is simple in design as well as simple to assemble. The service brake mechanism is disposed within a "cup-shaped" house (i.e., one having a floor and an outer peripheral wall, as claimed). The "cup-shaped" house is disposed within a recess having a shape and size corresponding to the house until a floor of the house abuts a floor of the recess. Corresponding holes are provided through the floors of the house and the recess to allow one or more thrust units of the service brake mechanism to pass therethrough. A cover closes the open end of the "cup-shaped" house. This design provides numerous advantages over all known prior art designs, including Smith et al.

Smith et al. does not disclose, teach or suggest a house having a floor and an outer peripheral wall. At most, the "house" of Smith et al. (i.e., element 30) includes only an outer peripheral wall with a hole passing therethrough. There is no disclosure, teaching or suggestion of a floor. Moreover, Smith et al. does not disclose, teach or suggest a frame having a recess defined by an outer peripheral wall and a floor. The "frame" of Smith et al. (i.e., element 12) simply includes an opening passing therethrough, not a recess with a floor. Moreover, the "recess" (i.e., the opening) of the "frame" does not include an outer peripheral wall that corresponds in size and shape to the outer peripheral wall of the "house". As such, the "house" of Smith et al. is not disposed within the "recess" in the "frame", and certainly not in a manner such that a floor of the "house" abuts a floor of the "recess" (since neither the "house" or the "recess" of Smith et al. includes a floor).

It should be noted that the above differences between Smith et al. and the present invention are substantial, and that because of these differences, Smith et al. suffers from many of the same disadvantages as other known prior art designs.

For example, the caliper of Smith et al. (and specifically the caliper housing 12 thereof) would require the machining of a deep "recess" (i.e., a hole passing all the way therethrough). Moreover, the design of Smith et al. does not allow for ready access to the brake mechanism, but rather would require complete disassembly to gain such access.

Moreover, Applicant respectfully submits that it would not have been obvious to modify Smith et al. to arrive at the present invention as claimed. It is well settled that the mere fact that references can be combined or modified does not render the resultant combination or modification obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Here, there is absolutely no motivation provided in Smith et al. for modifying the device disclosed therein in a way that would arrive at the claimed invention. Moreover, the modifications that one would have to make to Smith et al. to arrive at the present invention would be substantial, and essentially amount to a complete redesign of the caliper housing thereof. Applicant respectfully submits that one skilled in the art would not make such modifications absent using the present application as a road-map.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1-17, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,



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Amendments to the Drawings:

No amendments are made to the Drawings herein.